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## A PREVIOUSLY UNRECOGNIZED SUBSPECIES OF *PHILOTES SPECIOSA*

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GARTH & TILDEN (1963) included *Philotes speciosa* (H. Edw.) in the list of butterflies of the Yosemite on the basis of two specimens in the collections of the California Academy of Sciences, which had been presented by G. & R. Bohart. It was known at that time that these specimens represented an undescribed subspecies but description was postponed due to lack of material.

On April 24, 1966, Mr. John Lane took two specimens of this population at Briceburg, Mariposa Co., Calif., the locality where one of the previous specimens had been taken. On May 4-5 1968, Lane and Hughes collected the same area and took two more specimens including a female. These recent specimens indicate the existence of a population, though little known or collected. For this reason the following name is proposed.

### *Philotes speciosa bohartorum* Tilden, new subspecies

General appearance: above, male larger darker and duller and with wider fuscous borders, than nominate *speciosa*. Female, entirely fuscous above with white fringes. Below, both sexes, whiter and with reduced spotting.

Holotype male: Forewing 9.8 mm. Scaling of wings thin, the dark markings of the under surface showing through the wing faintly. Ground color dull gray or fuscous, the blue overlay faint and never completely covering the gray. Fuscous borders wide, not sharply defined, grading gradually into the blue overlay of the discal area. Terminal line dark but not conspicuous against the dark ground color. Fringes white, narrow, darkened (checkered) at vein tips, more so on forewing than on hindwing.

Below white, a gray shade along anal margin of forewing. Maculation of forewing consisting of a postbasal spot on right wing (this spot missing on left wing); a moderate sized spot across end of cell; a small spot in cell  $R_2$ ; a larger spot in cell  $R_3 + 4$ ; similar spots in cells  $M_1$ ,  $M_2$ , and  $Cu_1$ , these five spots round or slightly oblong, nearly or quite filling the cells from vein to vein and forming a postmedian band of which the spot in cell  $R_3 + 4$  is displaced inwardly. Maculation of hindwing consisting of an incomplete postbasal band formed of a small spot in cell  $Sc + R_1$ , a tiny dot at the base of the cell and a dark fleck on the anal margin; postmedian band of seven spots, the first in outer end of cell  $Sc + R_1$ , the second in cell  $R_5$  (smaller and displaced outwardly), one small spot each in cells  $M_1$  and  $M_2$  (these displaced far outwardly), no spot in cell  $M_3$ , a very small spot in cell  $Cu_1$  (displaced far inwardly), a small spot in cell  $Cu_2$  (directly below that in cell  $Cu_1$ ), and a small dot in cell  $A_2$  (displaced inwardly). This postmedian band is very irregular and could be interpreted as unrelated spots.

Antennae annulated white and black, apparently of thirty-two segments, of which twelve or thirteen form the club. Nudum of ten segments. Palpi white with black tips; legs whitish; under surface of abdomen whitish.

Allotype female: Forewing 10.5 mm. Upper surface entirely fuscous with no trace of blue. Fringes white, those of the forewing checkered, those of the hind wing uniformly white. Below white, a fuscous shade along the inner margin of the forewing. Maculation very similar in general pattern to that of the holotype. Fringes of forewing plainly checkered; fringes of hindwing with small dark points at vein ends. Antennae, palpi and legs essentially as in holotype.

Type material consists of six specimens. Holotype male, Briceburg, Mariposa Co., Calif., 24 April 1966, leg. J. Lane. Allotype female, same locality, 5 May 1968, leg. K. C. Hughes. One paratype male, same data as holotype. One paratype male, same locality, 4 May 1968, leg. J. Lane. One paratype male, same locality, 3 June 1938, leg. R. Bohart. The sixth specimen is labelled "Mariposa, Calif., 30 April 1932". The collector is not indicated but there is a label reading "Pres. by G. & R. Bohart". Since this specimen is not labelled as from Briceburg, it is not designated as a paratype.

Type locality: Briceburg, Mariposa Co., Calif. The specimens

were taken, as Mr. Lane has informed me (in litt.), just behind the Briceburg Station where an old bridge crosses the Merced River.

Variation in material at hand: The holotype and the two recent paratypes are nearly identical in coloration, but differ in size. One paratype is smaller (forewing 9.3 mm) and the other larger (forewing 11.0 mm) than the holotype. Both of the Bohart specimens are lighter in general facies. I ascribe this to fading with age. General appearance of the older specimens is very similar to that of the recent ones except that the wing surface of the older specimens is paler, causing the dark borders to stand out more clearly. There is very little significant variation among the specimens.

From nominate *Philotes speciosa*, *P. s. bohartorum* may be discriminated by its larger size, darker and duller dorsal surfaces, and more clearly white lower surfaces with reduced spotting. Dr. John S. Garth has a specimen of *Philotes speciosa* from Hume Lake in Kings-Sequoia National Park. I have not seen this specimen. It was captured too far from Briceburg to be included as part of the type material of *P. s. bohartorum*.

The type locality of *Philotes speciosa* (H. Edwards) is Havilah, Kern Co., California. The type is deposited in the American Museum of Natural History in New York. Except for the type, topotypical material has not been located. Dr. Alexander B. Klots of the American Museum kindly examined the type, and compared it with two males and three females labelled Mojave Desert, Kern Co., 2500 ft., May 14, 1914, and informed me that this material including the type, appeared to be reasonably homogeneous. It would seem that the type of *P. speciosa* is to be associated with the usual concept of this species as obtained from Mojave Desert material. It seems unlikely that the subspecies described in this paper could belong to the same population as the type.

A word may be said about the locality, Havilah. This now very small community was once the county seat of Kern County when horse stages skirted the foothills of the Sierra Nevada rather than crossing the valley which was at that time very difficult to traverse because of marshes and rivers. Havilah was then a center, and as is the case with many such pioneer stations, it is very likely that material taken at some distance from the actual town was labelled Havilah, since this was the only name

locality for some distance around. Only further study can determine if the type of *P. speciosa* came actually from near Havilah, or whether it in fact came from some distance away, but in any case, if the type resembles the material from Mojave, then the population from Briceburg is quite different.

Disposition of the type material: Holotype male and allotype female deposited in the Los Angeles County Museum as the gifts of Mr. J. Lane and Mr. K. C. Hughes. The Bohart specimens are returned to the California Academy of Sciences. One paratype in the collection of J. Lane and K. C. Hughes. The remaining paratype in the collection of the author.

This subspecies is named for Drs. G. & R. Bohart, the collectors of the first specimens, at the suggestion of Mr. John Lane. I am indebted to Mr. Lane and to Mr. Hughes for the loan of specimens, and to the California Academy of Sciences, through Curator Hugh B. Leech, for the loan of their material.

#### REFERENCES CITED

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